

IN THE SPECIFICATION:

The specification as amended below with replacement paragraphs shows added text with underlining and deleted text with ~~strikethrough~~.

Please REPLACE paragraph [0037] with the following paragraph:

[0037] FIG. 7A through 7C are waveforms when the upper core origin is ~~inclined~~traveling toward the first sensor coil 2a from the coil origin. In this case, the inductance L1 of the first sensor coil 2a becomes greater than the inductance L2 of the second sensor coil 2b during the negative cycle of the triangle input. Accordingly, the input waveform V+ input into the positive terminal of the voltage comparator 11 has a longer time delay in comparison with the input waveform V- as shown in FIG. 7B. FIG. 7C illustrates a rectangular waveform Vd output from the digital signal processor 12 corresponding to the waveforms in FIG. 7B.